Filing Date: December 2, 2003 US. Express Mail No.: EV 300111265 US

Abstract of the Disclosure

According to one aspect of the present invention, an apparatus for optically combining light beams is disclosed. The apparatus includes a set of prism shaped doorways configured to receive output beams from at least one optical device. Each of the plurality of doorways has a common refractive index. The apparatus also includes a set of spherical mirrors disposed substantially parallel to the plurality of doorways. Each mirror is associated with one of the plurality of doorways. The apparatus further includes a boundary layer disposed between the set of doorways and the set of mirrors. The boundary layer has a refractive index greater than the common refractive index of the plurality of doorways. The common refractive index of the set of doorways and the refractive index of the boundary layer are configured to change the angle of each of the received output beams to combine the set of received output beams into a single output beam.

15

10

5